

Listing of the Claims

1. (Currently Amended) A device for collecting breast duct fluid from within a breast duct in order to detect breast cancer or precancer comprising:

a [flexible] probe having a diameter sized to access a breast duct and a distal portion being capable of contacting an interior lumen of a breast duct and retrieving a sample of the breast duct fluid from within the duct for analysis, and wherein said probe is free of an opening through which a fluid from an external source can be introduced into said probe and pass through said probe into the duct when said probe is positioned within the breast duct[.], and wherein said probe is rigid before entry into the breast duct, and flexible upon resistance in the duct.

2. (Previously presented) A device as in claim 1, wherein the distal portion comprises an absorbant material that can absorb the breast duct fluid.

3. (Original) A device as in claim 1, wherein the distal portion comprises a collection portion that can collect the breast duct fluid it contacts.

4. (Original) A device as in claim 3, wherein the collection portion is tubular.

5. (Original) A device as in claim 3, wherein the collection portion extends some distance from the probe.

6. (Original) A device as in claim 1, wherein the distal portion comprises a surface having molecules affixed that bind an agent in the ductal fluid it contacts.

7. (Original) A device as in claim 1, wherein the distal portion comprises a means to measure a quality of the ductal fluid *in situ*.

8. (Original) A device as in claim 7, wherein the quality comprises an indicia selected from the group consisting of cell size, cell density, nuclear size, nucleoli size, and chromatin coarseness.

9. (Cancelled) A device as in claim 1, wherein the distal portion comprises a MEMS capable of detecting *in situ* a quality of the ductal fluid.

10. (Currently Amended) A device as in claim [9] 7, wherein the quality comprises a marker.

11. (Original) A device as in claim 1, further comprising a coating of an anesthetic on the exterior of the probe.

12. (Original) A device as in claim 1, wherein the probe is rigid before entry into the breast duct, and flexible upon resistance in the duct.

13. (Original) A device as in claim 1, wherein the probe comprises a shape memory material.

14. (Cancelled) A method of collection and analysis of breast duct fluid and detection of breast cancer or precancer comprising:

inserting a probe comprising a distal portion that can attract or collect breast duct fluid and contents; and

collecting a sample of ductal fluid in to the distal portion.

15. (Cancelled) A method as in claim 14, further comprising analyzing the sample of ductal fluid collected by the distal portion of the probe.

16. (Cancelled) A method as in claim 14, further comprising removing the probe from the breast duct and analyzing the sample of ductal fluid collected or attracted by the distal portion.

17. (Cancelled) A method as in claim 14, wherein analyzing comprises contacting the distal portion comprising ductal fluid with a reagent.

18. (Cancelled) A method as in claim 14, wherein analyzing comprises cytological analysis of ductal epithelial cells.

19. (Cancelled) A method as in claim 14, wherein analyzing comprises detection of a marker.

20. (Cancelled) A method as in claim 14, wherein analyzing comprises measuring a quality of the ductal fluid or ductal cells *in situ*.

21. (Cancelled) A method as in claim 14, wherein collecting comprises a waiting period with the probe in the duct for a period of time in a range from about a few seconds to a few weeks.

22. (Cancelled) A system of collection and analysis of breast duct fluid and detection of breast cancer or precancer comprising:

a device comprising a probe for accessing a breast duct having a distal portion for collecting or attracting ductal fluid and/or ductal cells;

reagents for contacting the distal portion for detection of a marker or analysis of the ductal fluid sample; and

instructions for use of the system to diagnose breast cancer or precancer in a breast duct.

23. (Cancelled) An article for collection of breast duct fluid and detection of breast cancer or precancer comprising:

a receiving unit of a sufficient dimension to isolate a breast duct opening on a nipple surface, wherein said unit can contact a bead of ductal fluid on the nipple surface at the ductal orifice after nipple aspiration of said nipple.